What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. An air flow measuring device comprising:

a housing;

a sub-passage with a inlet and a outlet for air flow formed in said housing, said sub-passage having a predefined curvature with a maximum downstream point; and

a flow measuring element located in said sub-passage at a position at least further downstream from said point.

2. The device of claim 1 wherein said outlet has a opening face in a plane parallel to said air flow into said inlet.

3. The device of claim 1 further comprising a first air vent located downstream from said flow measuring element said first air vent having a opening surface area of less than about fifty percent of a surface area of said outlet.

4. The device of claim 1 further comprising a second air vent located upstream from said flow measuring.

5. The device of claim 4 wherein said second air vent has a height of about 1 mm.

6. The device of claim 4 wherein said second air vent has an opening surface area ratio of less than about 1:10 compared to a sectional surface area of said sub-passage.

7. The device of claim 1 wherein said sub-passage further comprises a outer wall, said outer wall having a predefined groove for collecting unwanted matter in said air flow.

8. The device of claim 7 wherein said flow measuring element is located at a position at least above said groove.

9. The device of claim 1 wherein said device is located in an air intake passage of an internal combustion engine.

10. The device of claim 1 wherein said flow measuring element is coupled to an electronic circuit for processing data received from said element.

11. The device of claim 1 wherein said sub-passage further comprises an inclination of the outer wall at least before said point.

12. The device of claim 11 further comprising a third air vent positioned at the base of said inclination.

13. A engine comprising:

a engine control unit;

an air flow measuring device electrically coupled to said engine control unit for measuring air flow, said device comprising:

a housing;

a sub-passage with a inlet and a outlet for air flow formed in said housing, said sub-passage having a predefined curvature with a maximum downstream point; and

a flow measuring element located in said sub-passage at a position at least further downstream from said point.

14. The engine of claim 13 wherein said outlet has an opening face in a plane parallel to said air flow into said inlet.

15. The engine of claim 13 further comprising a first air vent located downstream from said flow measuring element said first air vent having a

opening surface area of less than about fifty percent of a surface area of said outlet.

16. The engine of claim 13 further comprising a second air vent located upstream from said flow measuring element.

17. The engine of claim 16 wherein said second air vent has a height of about 1 mm.

18. The engine of claim 16 wherein said second air vent has an opening surface area ratio of less than about 1:10 compared to a sectional surface area of said sub-passage.

19. The engine of claim 13 wherein said sub-passage further comprises a outer wall, said outer wall having a predefined groove for collecting unwanted matter in said air flow.

20. The engine of claim 19 wherein said flow measuring element is located at a position at least above said groove.

21. The engine of claim 13 wherein said sub-passage further comprises an inclination of the outer wall at least before said point.

22. The engine of claim 21 further comprising a third air vent positioned at the base of said inclination.

23. An air flow measuring device comprising:

a housing and a sub-passage formed in said housing, said sub-passage having a predefined curvature with a maximum downstream point and a flow measuring element located in said sub-passage at a position at least further downstream from said point.

24. The device of claim 23 wherein said sub-passage further comprises a inlet and a outlet for air flow, said outlet having a opening face in a plane parallel to said air flow into said inlet.

25. The device of claim 24 further comprising a first air vent located downstream from said flow measuring element said first air vent having a opening surface area of less than about fifty percent of a surface area of said outlet.

26. The device of claim 23 further comprising a second air vent located upstream from said flow measuring element.

27. The device of claim 26 wherein said second air vent has a height of about 1 mm.

28. The device of claim 26 wherein said second air vent has an opening surface area ratio of less than about 1:10 compared to a sectional surface area of said sub-passage.

29. The device of claim 23 wherein said sub-passage further comprises a outer wall, said outer wall having a predefined groove for collecting unwanted matter in said air flow.

30. The device of claim 29 wherein said flow measuring element is located at a position at least above said groove.

31. The device of claim 23 wherein said device is located in an air intake passage of a internal combustion engine.

32. The device of claim 23 wherein said flow measuring element is coupled to an electronic circuit for processing data received from said element.

33. The device of claim 23 wherein said sub-passage further comprises an inclination of the outer wall at least before said point.

34. The device of claim 33 further comprising a third air vent positioned at the base of said inclination.